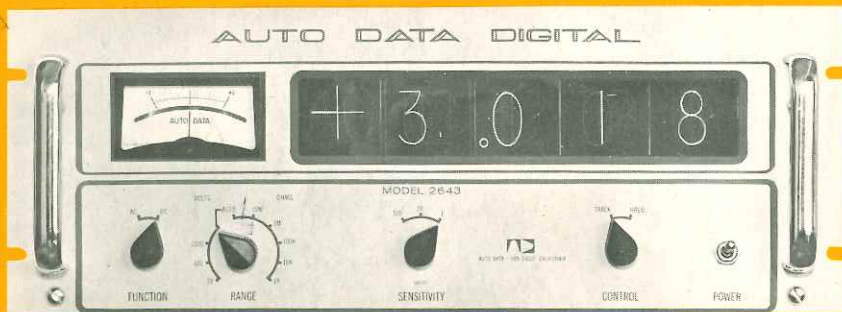


INSTRUMENTS

PRECISION DIGITAL MEASURING

D-36 *DNA* *Rec 11-63*

SHORT FORM CATALOG 1963



AUTO DATA INC.



a subsidiary of houston instrument corporation

SUBJECT INDEX

Page No.

4-7	Model 2640 Series AC-DC-Ohms Digitals
8-9	Model 2660 Low Level Digital Voltmeter
10	Model 3100A Scanner
11	Model 3205 Scanner
12	Model 2654 Computer Model Digital Voltmeter/Ratiometer
13	Model 1520 Series Digital Buffer Storage Units
14-15	Model 653 Decameter

The right is reserved to make changes in construction, design and prices without notice.



The extremes of reliability and ease of operation and maintenance are all features designed to put Auto Data among the leaders of the precision digital measuring industry. These features, plus a higher degree of flexibility, are all concepts realized in Auto Data designs. A pioneer in the use of dry reed relays for digital measuring and signal selection applications, Auto Data has, through experience, been able to utilize these components in a way that maximizes their reliability.

In fact, reliability considerations have overridden all other technical decisions in order to bring to you, our customer, the most trouble free line of digital instruments available.

When considering the purchase of digital instruments, please remember that reliability has to be designed in, not priced in. Look closely at the type of construction, simplicity of circuitry, quality of components and for less obvious items such as the number of solder joints and cable connections. Above all, we would definitely recommend that you check with present users to determine the reliability they have experienced with an instrument under consideration.

May we send you a descriptive brochure or complete catalog covering any or all of our products?

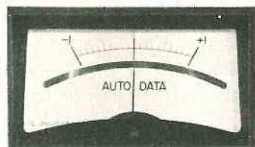


MODEL 2640 SERIES DIGITAL VOLTMETERS

The 2640 Series Digital Voltmeters provide means for the complete, reliable, accurate measurement of AC and DC voltages as well as resistance in a single, self-contained unit. Plug-ins and external modules are no longer required, resulting in higher reliability, smaller size and increased ease of operation and maintenance. This completely floating instrument utilizes tamper proof reed switches in a unique double potentiometer circuit which greatly extends the switch life. The calibrated null meter provides effective 5 digit resolution on a 4 digit instrument. Pictured above is the Model 2643, AC-DC-Ohm Digital. Other members of the 2640 series provide DC only, AC-DC, DC-Ohm and Ohms only measuring capability.



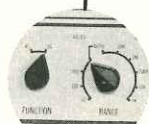
Ultra-reliable, long life, tamper proof reed relays are utilized for switching in a unique balancing circuit. Operation of these switches under zero current conditions extends their life greatly over other modes of switching. The calibrated front panel Null Meter accurately displays the unbalance existing between the unknown being measured and the internally generated balancing voltage. This exclusive feature effectively extends the resolution of the 2640 Series Digital to that of 5 digit instruments.



The Track hold switch allows the instrument to be locked on any desired value for source adjustment using the null meter. It also prevents instrument "run around" when in stand-by mode of operation.



True 2, 3 or 4 digit operation is possible with the calibrated sensitivity control. Very noisy signals can be read accurately without the last digits running around. Less than 1 digit variation can be read in the meter.



The front panel operating controls have been chosen for maximum simplicity and ease of operation. The function switch merely selects AC or DC operation. Ohms selection is accomplished with the range switch and is independent of the position of the Function Switch. Either automatic or manual range selection is available.

FEATURES

- Completely floating
- High rejection input filter
- 5 digit resolution
- Overload protection
- Decade reads guaranteed 3 years
- High common mode rejection

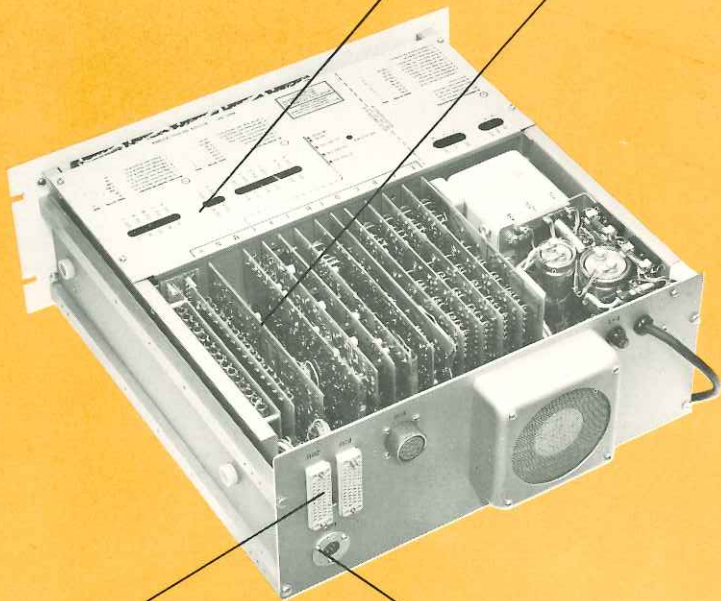
SPECIFICATIONS

		RANGE	ACCURACY
DC VOLTAGE	INPUT RESISTANCE	VOLTS	
	1000 megs 11 megs 10 megs	0.000 to 9.999 ↑ 00.00 to 99.99 ↑ 000.0 to 999.9 ↑	± 1 digit ± 1 digit ± 1 digit
RESISTANCE		OHMS	
		000.0 to 999.9 ↑ 0000 to 9999 ↑ 00.00 to 99.99K ↑ 000.0 to 999.9K ↑ 0000 to 9999K ↑	± 1 digit ± 1 digit ± 1 digit ± 2 digits ± 3 digits
AC VOLTAGE	INPUT INPEDANCE	VOLTS	
	1 meg & 55* mmfd. 10 megs & 55* mmfd. 10 megs & 55* mmfd.	0.000 to 9.999 00.00 to 99.99 000.0 to 999.9	.2% or 3 digits .2% or 3 digits .2% or 3 digits
FREQUENCY RESPONSE 35 to 10,000 cps.			

* input cable capacity

Extensive use of plug-in construction facilitates maintenance. Interchangeable Decade Boards reduce spares requirements and simplify trouble shooting.

Calibration controls are readily accessible through openings in the inner top cover. Condensed calibration instructions on this cover guide the operator.



Optional printout buffer provides isolated decimal contact closures suitable for operation of a wide variety of printout devices as well as card and tape punches. Decimal outputs can be easily encoded to any desired code.

A single input for all functions simplifies operation. Either front or rear panel inputs are available.



**NOW...ALL the advanced Features of
Auto Data Digitals...
plus 1 μ V/digit Sensitivity!**

- 1 μ V Sensitivity
- 300% Over-ranging
- Overload protection
- 3, 4 or 5 digit operation
- Floating input



MODEL 2660 LOW LEVEL DIGITAL VOLTMETER

The Model 2660 Low Level Digital Voltmeter accurately measures DC voltages from 1 microvolt to 1000 volts automatically. The standard features of other Auto Data Digitals are all available in the Model 2660. Automatic ranging down to three volts and manual ranging to 30 mv full scale are standard features. This advanced instrument offers the advantages of a microvolt preamplifier and A to D converter in a single package.



MODEL 3100A SCANNER

The Model 3100A Scanner is a 100 position—4 pole scanner for automatic or programmed signal selection. High reliability, ease of operation and the ultimate in flexibility are standard features. Remote location of the signal selection relays is possible if desired. Low Level (microvolt) signal selection relays are available on special order. A large, wide view, in-line readout displays the scanned position.



MODEL 3205 SCANNER

The Model 3205 Scanner is a 200 position—2 pole scanner for automatic or programmed signal selection applications. An internal sequential programming capability allows this unique instrument to be utilized in a variety of ways. Up to 4 programs are selectable from the front panel. The active scan points, up to the full 200, are determined by inserting ordinary carbon resistors into corresponding matrix positions on plug-in program circuit boards.



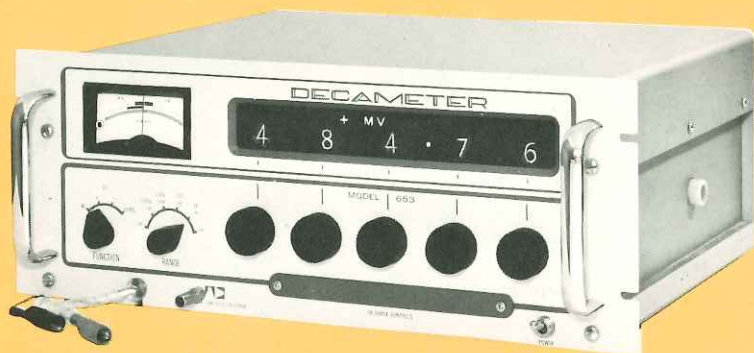
MODEL 2654 COMPUTER MODEL DIGITAL VOLTMETER/RATIOMETER

Many analog computer installations require an accurate readout device for setting potentiometers and measuring various DC voltages. The Model 2654 satisfies this purpose. The readout, keyboard and operating controls are contained in a small module which may be remotely located in a control area where panel space is at a premium. The main chassis may then be located where space is more readily available. When used to set potentiometers, numbers are set into the instrument with the front panel keyboard. The instrument will then indicate null when the desired potentiometer setting is reached.



MODEL 1520 SERIES BUFFERS

The Model 1520 Series Digital Buffer storage units provide isolation between a wide variety of digital measuring and programming instruments and their associated readout devices, including printers and card punches. These Buffers accept either decimal or BCD information and provide isolated decimal (or specially coded) contact closure outputs.



MODEL 653 DECAMETER

The Model 653 Decameter is a precision differential instrument for the accurate measurement of AC or DC voltages as well as resistance. In operation the front panel meter is manually balanced by five fast acting rotary switches. When the panel meter is at null, the input value is displayed in a large in-line, in-plane, lighted display.

FEATURES

- Floating
- 10% over-ranging
- Fast acting switches
- 5 digit resolution
- .01% accuracy
- Automatic sensitivity control
- Overload protection
- Plug-in construction

GENERAL

The Model 653 Decameter is ideally suited for a variety of production and test applications. Its extreme flexibility, reliability, operating simplicity and ease of maintenance puts it in a class by itself for general purpose precision measurements. Simplified operating controls and single input cable for all functions are features designed to minimize the chance of operator error.



AUTO DATA INC.

a subsidiary of houston instrument corporation

5121 Weeks Avenue
San Diego 10, California

please address inquiries to

AUTO DATA SALES

Houston Instrument Corporation
4950 Terminal Avenue
Bellaire 101, Texas